PATENT
CCCUSA 3.0-001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of   :
Bates   :
                                   :   Group Art Unit: 2756 **RECEIVED**
Application No. 09,179,332   :
                                   :   Examiner: M. Geckil JAN 2 2 2001
Filed: October 27, 1998   :
                                   :   Date: January 2, 2001
For: Multi-User Computer System   :   **Technology Center 2100**
_____X

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.
The fee has been calculated as shown below.

CLAIMS AS AMENDED

(1)	(2) CLAIMS REMAINING AFTER AMENDMENT	(3)		(4) HIGHEST NUMBER PAID FOR	(5) NUMBER OF EXTRA CLAIMS	(6) RATE	(7) ADDL. FEE
TOTAL CLAIMS	* 29	MINUS	**	29	= 0	x $ 9 = $	0
INDEP. CLAIMS	* 4	MINUS	***	4	= 0	x $ 40 = $	0
FEE FOR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM(S)						$135 = $	0
				TOTAL ADDITIONAL FEE FOR THIS AMENDMENT.........................$			0

*   If the entry in col. 2 is less than entry in col. 4 write "0" in col. 5.
** If the "highest number paid for" in this space is less than 20, write "20" in this space.
*** If the "highest number paid for" in this space is less than 3, write "3" in this space.

1.   ☒ Applicant claims small entity status under 37 C.F.R. 1.27.
2.   ☐ No additional fee is required.
3.   ☒ Charge $0.00 or any additional fees or credit overpayment to Deposit Account No. 12-1095. A duplicate copy of this sheet is enclosed.

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<center>RESPONSE</center>

Sir:

The present communication is responsive to the Official Action mailed June 30, 2000. A petition for a three month extension of the term for response to said Official Action, to and including December 30, 2000, is transmitted herewith. As December 30, 2000 is a Saturday, and a day on which the Patent and Trademark Office is closed, the present response is timely filed with a Certificate of Mailing on January 2, 2001, the next succeeding business day on which the Patent and Trademark Office is open.

Claims 1-29 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Perholtz et al.*, U.S. Patent 5,732,212[1]. Reconsideration and withdrawal of this rejection are respectfully requested. It is respectfully submitted that *Perholtz* not only

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[1] Inasmuch as the present application claims benefit of a provisional application filed prior to the publication date of this reference, a § 103(a) rejection is believed to be inappropriate. However, as the filing date (January 13, 1994) of *Perholtz* is prior to the filing date of said provisional application, the reference would be available under § 102(e) absent some further showing by Applicants of an earlier invention date.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on January 2, 2001.

MARCUS J. MILLET
Typed or Printed Name of Person Signing Certificate

fails to teach the method set forth in claim 1 but actually teaches away from the claimed method. At the outset, *Perholtz* is not seen as teaching any method for interfacing "a plurality of server computers with output and input devices at a plurality of user locations." The Official Action posits the "remote site" (Reference No. 1 – FIG. 1) of *Perholtz* as a user location and refers to the "Host PC Processor" (Reference Nos. 10, 16 and 20) as the "server computers." Nothing in *Perholtz* has been pointed out in the Official Action as stating or suggesting that the *Perholtz* system is operable to connect more than one "remote site" with the various Host PC Processors, nor has anything been advanced as teaching how one could modify the *Perholtz* system to use more than one remote site with a given assembly of host PC processors.

Moreover, nothing in *Perholtz* has been pointed out as suggesting the steps set forth in paragraphs (c), (d) and (e) of claim 1. The Official Action characterizes the "Host Units" 00, 01 … (Reference Nos. 8, 13 and 18) as constituting a switch in the *Perholtz* system (Official Action, page 3) and characterizes host unit 00 as functioning as a "control or supervisor computer to control the switch function … " (Official Action, page 4). The cited passage of the reference (col. 53, lines 2-21) does not support the characterization of host unit 00 as a control or supervisory computer. Instead, that passage in the reference states that once the modem connection has been established through host unit 00 all host units at a site simply monitor data from the "TVLINK.EXE program" executed at the remote location and that all of the individual host units check packets sent along the daisy chain of host units. When a packet with an address or "identification number" matching the identification number of a

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particular host unit travels along the daisy chain, that host unit respond by disconnecting from the daisy chain and establishing communication with the remote site. Nothing in that passage of the reference suggests that host unit 00 acts in a control or supervisory capacity.

But even assuming for purposes of argument that the host units somehow correspond to a switch and a supervisory computer, *Perholtz* teaches directly away from the concept of detecting "helper codes" in input signals and operating the supervisory computer and switch in response to the "helper codes" so as to connect the particular set of input and output devices which sent the helper codes to a "helper computer," and then running an interactive program for selecting a server computer "in said helper computer" as recited in steps (b), (c) and (d) of claim 1, and finally actuating the switch to connect or disconnect one or more server computers "selected during operation of said interactive program" (i.e., the interactive program in the helper computer) with input and output devices at one or more of the user locations, as recited in step (e) of the claim.

The Official Action points out that "the monitoring computer at [the] remote site uses the interactive program to make a connection" (Official Action, page 4). That is, the Official Action asserts that in *Perholtz* system, a program referred to as TVLINK.EXE operates "within the remote PCs CPU" and that program controls selection of particular host units and hence particular host PCs or "server computers." Thus, construing the reference in accordance with the assertions in the Official Action, *Perholtz* teaches that one should operate a program at each <u>user location</u> in order to control the switch and

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hence control connections between the I/O devices at the user location and the server computers. That teaching leads directly away from the method as claimed in claim 1. In the claimed method, it is the helper computer, connected to the user location through the switch in response to the helper codes, which performs the interactive program to control selection of server computers and connections of server computers to I/O devices at user locations.

The use of the helper computer, and some of the advantages which arise from the use of a helper computer connectable to the user locations through a switch to perform the function of selecting server computers are discussed at page 3, line 26 through page 5, line 33 of the present specification. See also pages 32-40 of the specification. One manifest advantage is that there is no need for a computer at each user location. Indeed, the preferred embodiment shown in the present specification and drawings does not have a computer capable of running an interactive server selection program installed at any of the user locations. Consider a system having hundreds of user locations and scores of server computers, as in the most preferred embodiments of the present application. If one were to try to implement the *Perholtz* system in that environment, one would have to equip hundreds of user locations with appropriate computer hardware and with the interactive server selection software. But even then, the *Perholtz* system still would not be operable unless and until the computer at each user location was supplied with a complete data base defining all of the various server computers or host unit PCs. Thus, the *Perholtz* TVLINK.EXE program executed at the remote unit or user location requires a list of available host units "created and maintained" by the

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remote unit PC and loaded into the remote unit PC as part of the "set up system 702 processing" (col. 44, lines) 25-27. This data "must be defined in the remote PC's call list" (col. 45, lines 60-67). As set forth in *Perholtz*, the descriptions of the various host units to be accessed must be maintained as part of this call list in the remote PC (col. 46, lines 1 et seq.). Whenever a server changes, the call list at every remote location would have to be changed accordingly. By contrast, when a helper computer is employed, it is only necessary to change the data accessible to the helper computer. Here again, these advantages are particularly significant in operation of a large system with numerous changes.

The method according to claim 1 also offers significant advantages with respect to security. In the *Perholtz* system, access to particular hosts is controlled by passwords stored in the remote PCs (col. 46, lines 9-12). Because the remote PC performs the security screening, the passwords necessarily must be accessible at the remote PC. By contrast, in a system where a helper computer manages the connection and disconnection of various servers to the various user locations, there is no need to provide the controlling passwords or other controlling information to the various user locations. Also, the task of updating security information is vastly simplified. *Perholtz* does not teach the use of a helper computer as discussed above.

For the reasons set forth above, the rejection of claim 1 and claims 2-7 dependent thereon should be withdrawn.

Independent apparatus claim 8 distinguishes over *Perholtz* for reasons directly analogous to those pointed out above in connection with claim 1. Here again, the Official Action characterizes the host units (Reference Nos. 8, 13 and 18)

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as constituting a switch and as also constituting a supervisory computer system and characterizes the remote site (Reference No. 1) as a user location. But nothing in *Perholtz* has been pointed out as suggesting either that a supervisory computer system include a "helper computer" as recited in paragraph (b) operative to run an interactive program for selecting particular server computers for association with user locations, or as suggesting that the switch is operable to connect or "associate" the helper computer with input and output devices at "any one of said user locations" as also recited in paragraph (b) of the claim. Again, in the *Perholtz* system, the only program for selection of host units and host PCs (the asserted server computers referred to in the Official Action) is run by a computer at the remote location, i.e., at the alleged user location of *Perholtz*.

As *Perholtz* has not been shown to teach a "helper computer" as recited in paragraph (b) of the claim, it does not have a supervisory computer system "operative to instruct the switch to connect" a set of input and output devices which "sent a helper code" to the helper computer, as recited in paragraph (c) of the claim. Nor does it have code recognition devices "operative to detect one or more predetermined helper codes" in input sent by "each said input device", i.e., input sent from user locations. The only contendable code recognition devices in *Perholtz* system are the host units which watch for packets addressed to particular host units (col. 53, lines 2-20). However, when a host unit detects a correctly addressed packet, it merely establishes communication between the PC at the remote unit and the particular server PC ("host PC") associated with that unit. Nothing in *Perholtz* has been suggested as teaching the user of helper codes which cause the code recognition devices

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to pass the helper codes to a supervisory computer system, and in turn cause the supervisory computer system to connect the remote location to the helper computer. For all of these reasons, rejection of claim 8 on *Perholtz* should be withdrawn. The rejections of claims 9-20 dependent from claim 8 should be withdrawn for the same reasons.

With respect to independent claim 21, the Official Action sets forth at page 3 a list of teachings in *Perholtz* which allegedly correspond to paragraphs (a) through (d) of the claim. As the language used in these paragraphs of the Official Action appears to track the language of claim 21, it is understood that the Official Action relies on the teachings as meeting the features of the claim. The asserted "plurality of user ports" referred to the in the Official Action is a single dotted line coming from modem (7) to the left side of host unit 00 (8). There is only one such connection at the "host site" or collection of host units accessed through the modem or wired connection to the remote unit. That is, assuming *arguendo* that the plurality of host units connected by a daisy chain cable represent a "switch" as asserted in the Official Action (page 3, paragraph (c)), that switch is associated with only one alleged user port[2].

The asserted "code recognition devices" are simply parts of the individual host units (Reference Nos. 8, 13 and 18) which recognize address codes sent to the alleged user port or modem 7 from the remote unit. When the remote PC sends an access request code (hex 70 and hex 00) along with the unit

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[2] While *Perholtz* contemplates different daisy chains or "host sites" (col. 11, lines 45-50), those sites operate independently of one another. There is no switch capable of associating the various host PCs at different sites with a particular user input port.

identification number for a particular host unit, the particular host unit unchains the daisy chain and directly connects to the data line, thus establishing communication between the PC associated with the particular host unit and the remote PC (col. 53, lines 12-21). Thus, the addresses recognized by the particular host units are simply addresses or unit identification numbers sent by the remote PC[3]. Nothing in the reference has been pointed out as suggesting a system including plural user ports in conjunction with code recognition devices which are arranged to detect command codes in input signals supplied through the user ports and which are also arranged to "provide a code output including code data representing such command code and address data representing the user port carrying the input signals in which such command code was detected" as recited in claim 21.

As explained in the specification at pages 32-33, when the code recognition device associated with a particular user port detects a command code, the code recognition device sends a message which includes both the particular command code which is detected, and an address denoting a particular user port where that command code was detected. This allows the supervisory computer to ascertain not only that a command code was detected but that the command code came from a particular user port. As *Perholtz* does not teach a system in which it is necessary to discriminate between plural user ports, *Perholtz* does not teach any system in which a command code detection device provides such a message. *Perholtz* does not teach the more detailed

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[3] The "addresses" referred to at col. 54 are the addresses 830 (col. 54, lines 41-43). These are "screen character addresses, i.e., the location of a character on the screen; they are not addresses of user ports, server computers or the like (col. 53, lines 64-65).

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arrangements set forth in claim 22-27 dependent from claim 21.

As to claim 28, nothing in *Perholtz* has been pointed out as teaching operating plural server computers from a plurality of user locations. In *Perholtz'* system, the alleged server computers or host PC processors at a given host site or daisy chain are associated with one and only one remote site or user location. Moreover, the Official Action posits the host units together as constituting the switch and as also constituting the supervisory computer. The same host units are characterized as the units which detect the command codes. Manifestly, in such a system, it would be impossible to <u>forward</u> the detected command code to the supervisory computer, as recited in step (b) of claim 28. If the reference is construed as characterized in the Official Action, the supervisory computer (host unit) itself detects the command codes.

Moreover, with regard to claim 29, nothing in *Perholtz* has been pointed out as teaching or suggesting detecting the command codes "at a plurality of the user interface processors associated with said user ports" and associating "address data with each said command code" so that the address data "depends at least in part upon the identity of the user interface processor which detected such command code." Again, *Perholtz* host units may detect commands and addresses sent from the remote PC or "TVLINK.EXE program" (col. 53, lines 10-20) but they do not detect commands and then associate address data dependent upon the identity of the host unit which detected the command with such command.

The allegations in the Official Action that claimed features are "all obvious variations of the well known features of the monitoring and managing computers remotely" (page 4, final

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sentence) are noted and respectfully traversed as contrary to law. It is the PTO's burden to establish a *prima facie* case of obviousness by pointing out how the prior art teaches or suggests combinations including all features of the claimed inventions. If the Examiner contends that some specific feature constitutes "well known" prior art, the Examiner is respectfully requested to adduce teachings from the references which support that contention. The allegation that "other claimed features" are obvious variations of "the well known features" of the prior art is so general that it does not fairly appraise Applicants of the grounds for rejection (35 U.S.C. § 132). Applicants can only guess as to which features the Examiner regards as subsumed by this broad statement.

Reference in the same sentence of the Official Action to "the Beasley patent cited by the Applicant" is improper inasmuch as no rejection on Beasley has been made. *In re Hoch*, 428 F.2d 1341, 1342, n. 3, 166 U.S.P.Q. 406, 407 n. 3 (C.C.P.A. 1970); M.P.E.P. 707.02(j). Applicants need not answer a rejection on *Beasley* or on the combination of *Beasley* and *Perholtz* as no such rejection has been advanced. However Applicants would respectfully direct the Examiner's attention to the discussion of *Beasley* at page 2, line 15 through page 3, line 22 of the present specification. As there discussed, *Beasley* teaches directly <u>away</u> from the present invention. For example, *Beasley* uses a rudimentary program run by a "pod" or rudimentary computer at each user location to control selection of server computers. *Beasley*, like *Perholtz*, teaches directly away from the concept of the helper computer discussed above in connection with claims 1 and 8 and the claims dependent thereon. Further, *Beasley* teaches directly <u>away</u> from the concept of sending input

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data "in a data stream along with command codes" from the input devices at the user locations as recited in claim 28. *Beasley*'s pods separate the command codes from the user data and send the command codes on separate command channels.

For the reasons set forth above, reconsideration and favorable action are respectfully requested. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he contact Applicants' attorney at the (908) 654-5000 in order to overcome any additional objections which he may have. If any fee is due in connection with this Amendment, the Examiner authorized to charge our Deposit Account No. 12-1095 therefor.

Respectfully submitted,

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